

AMENDMENT

Please amend the application as follows:

In the specification:

Please replace the title on page 1 with the following title:

-- ALPHA-GALACTOSIDASE ENZYMES, NUCLEIC ACIDS ENCODING THEM  
AND METHODS OF MAKING AND USING THEM --

In the claims:

Please replace claims 1, 5, 9, 13, 14, and 19 with amended claims 1, 5, 9, 13, 14, and 19  
as follows:

-- 1. (Thrice Amended) An isolated polynucleotide comprising a member selected  
from the group consisting of:

- D<sup>1</sup>
- (a) a polynucleotide having at least a 70% identity to a polynucleotide  
encoding an enzyme comprising the amino acid sequence set forth in SEQ ID NO: 4 and having  
alpha galactosidase activity; and
  - (b) a polynucleotide that is complementary to a polynucleotide of (a).

5. (Twice Amended) An isolated polynucleotide comprising a member selected  
from the group consisting of:

- D<sup>2</sup>
- (a) a polynucleotide having at least a 90% identity to a polynucleotide  
encoding an enzyme having a sequence as set forth in SEQ ID NO:4 and having alpha  
galactosidase activity; and
  - (b) a polynucleotide complementary to a polynucleotide of (a).

D<sup>3</sup> 9. (Amended) A process for producing a cell that expresses the polypeptide encoded by a DNA contained in a vector comprising transforming or transfecting the cell with the vector of claim 6.

D<sup>4</sup> 13. (Twice Amended) The polynucleotide of claim 1, wherein the polynucleotide has at least 95% identity to a polynucleotide encoding the amino acid sequence set forth in SEQ ID NO:4 and encodes a protein having alpha galactosidase activity.

D<sup>5</sup> 14. (Thrice Amended) The polynucleotide of claim 13, wherein the polynucleotide has at least 97% identity to a polynucleotide encoding an alpha galactosidase comprising the amino acid sequence set forth in SEQ ID NO:4.

D<sup>6</sup> 19. (Thrice Amended) The polynucleotide of claim 18, wherein the single stranded DNA is a coding sequence of a polypeptide having alpha galactosidase activity. --

Please add claims 24-45.

24. (NEW) An isolated polynucleotide that hybridizes to a polynucleotide that encodes SEQ ID NO:4, or a complement thereof, and has alpha galactosidase activity.

D<sup>7</sup> 25. (NEW) The isolated polynucleotide of claim 24, wherein the polynucleotide that encodes SEQ ID NO:4 comprises SEQ ID NOS:1, 2 or 3.

26. (NEW) The isolated polynucleotide of claim 24, wherein the polynucleotides hybridize under stringent conditions.

27. (NEW) The isolated polynucleotide of claim 24, wherein the polynucleotides hybridize under conditions comprising a wash step of 1X SET (150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na<sub>2</sub>EDTA) containing 0.5% SDS at room temperature.

28. (NEW) The isolated polynucleotide of claim 27, wherein the wash step further comprises another wash in fresh 1X SET at -10°C.

29. (NEW) An isolated fragment comprising a nucleic acid sequence of a portion of the isolated polynucleotide of claims 1, 5, or 24, wherein the fragment encodes a polynucleotide having alpha galactosidase activity.

30. (NEW) An isolated fragment comprising a nucleic acid sequence of a portion of a polynucleotide encoding SEQ ID NO:4, wherein the fragment encodes a polypeptide having alpha galactosidase activity.

31. (NEW) An isolated fragment consisting of a nucleic acid sequence of a portion of the polynucleotide of claims 1, 5, or 24, and capable of identifying a polynucleotide encoding a polypeptide having alpha galactosidase activity.

32. (NEW) An isolated fragment consisting of a nucleic acid sequence that hybridizes under stringent conditions to a polynucleotide that encodes SEQ ID NO:4, or a complement thereof, and capable of identifying a polynucleotide encoding a polypeptide having alpha galactosidase activity.

33. (NEW) An isolated fragment consisting of a nucleic acid sequence of a portion of a polynucleotide encoding a polypeptide of SEQ ID NO:4, or a complement thereof, and capable of identifying a polynucleotide encoding a polypeptide having alpha galactosidase activity.

34. (NEW) An isolated fragment consisting of a nucleic acid sequence that is a portion of a polynucleotide set forth in SEQ ID NOS:1, 2, or 3, and capable of identifying a polynucleotide encoding a polypeptide having alpha galactosidase activity.

35. (NEW) The isolated fragment of claim 29, wherein the sequence is at least 15 bases.

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36. (NEW) The isolated fragment of claim 29, wherein the sequence is at least 30 bases.
  37. (NEW) The isolated fragment of claim 29, wherein the sequence is at least 50 bases.
  38. (NEW) The isolated fragment of claim 31, wherein the sequence is at least 30 bases.
  39. (NEW) The isolated fragment of claim 31, wherein the sequence is at least 50 bases.
  40. (NEW) The isolated fragment of any one of claims 32-34, wherein the sequence is at least 30 bases.
  41. (NEW) The isolated fragment of any one of claims 32-34, wherein the sequence is at least 50 bases.
  42. (NEW) A polynucleotide probe comprising the fragment of claim 29.
  43. (NEW) A polynucleotide probe comprising the fragment of claim 30.
  44. (NEW) A polynucleotide probe comprising the fragment of claim 31.
  45. (NEW) A polynucleotide probe comprising the fragment of any one of claims 32-34.
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